432 Letters to the Editor

Nd:Yag laser treatment of extensive recalcitrant anal condyloma acuminata

An ideal treatment for genital condylomata acuminata would permanently destroy these viral induced lesions without pain and systemic toxicity. None of the currently available treatment modalities fulfill all these criteria. Laser surgery is one of the most effective treatment modalities of condylomata acuminata; the cure rate after a single CO₂ laser treatment was reported to be as high as 66-86%.1 However, the most recent data indicate that CO₂ laser surgery of multiple chronic genital warts has a cure rate of only between 23-27%.23 The Nd:Yag laser is also highly effective in treatment of cutaneous condylomata acuminata.4 The authors report two healthy non-immunosuppressed patients with extensive recalcitrant anal condylomata acuminata that were unresponsive to standard ablative treatment including CO₂ laser treatment but were completely cleared by a single Nd:Yag laser treatment.

A 35 year old white heterosexual non-immunosuppressed man had extensive anal condylomata acuminata present for over one year. He did not respond to over thirty treatments with podophyllin solution. On physical examination, the entire anal area was covered by genital warts. The patient was initially treated by CO, laser surgery, but at the twoweek follow up visit, the recurrent anal condylomata acuminata were noted and they were treated twice with cryosurgery and 100% trichloracetic acid without success. A combined procedure with a gastroenterologist was scheduled; a sigmoidoscopic examination showed no condylomata acuminata within the rectal canal and anal condylomata acuminata lesions were destroyed by Nd: Yag laser surgery as has been previously described (power 40 watts, focal spot 2 mm, pulse continuous wave, exposure duration one second).5 At two weeks, one, two and sixmonth follow up visits, the patient was free of lesions.

A 64 year old white healthy non-immunosuppressed woman had extensive anal condylomata acuminata that were present for over six months that did not respond to numerous treatments with podophyllin and cryotherapy. On physical examination the patient had over 70 anal warts. At the two-week follow up visit, post CO₂ laser surgery, the patient developed recurrent genital warts that were unresponsive to two treatments with cryosurgery and

100% trichloracetic acid, and a combined procedure with a gastroenterologist was performed. A sigmoidoscopic examination revealed no condylomata acuminata lesions within the rectal canal, and anal warts were treated by Nd:Yag laser surgery in an identical manner to patient one. After Nd:Yag laser surgery, the patient was free of lesions at two weeks, one, two and six month follow up visits.

Recently, Peterson and co-workers reported in this Journal that systemic alpha interferon increases the cure rate in laser treated patients with recalcitrant genital warts.³ They used in their study CO₂, argon and copper vapor lasers but not the Nd:Yag laser. Many physicians are hesitant to use Nd: Yag laser for the treatment of skin lesions because it is believed to be more painful, takes a longer time to heal and the extent of tissue destruction cannot be well appreciated visually. However, Stein and others and the authors' own experience indicate that Nd:Yag laser treatment of genital warts produces excellent cosmetic results and is not associated with higher morbidity.⁵ In conclusion, Nd:Yag laser surgery should be considered in patient with extensive genital warts refractory to other treatment modalities, and the effectiveness of Nd:Yag laser surgery in comparison to other laser treatment of genital warts should be further evaluated.

> ALEXANDER ZEMTSOV SITA CHOKHAVATIA, Texas Tech University School of Medicine, 3601 Fourth Street, Lubbock, TX 79430. USA

- Krebs HB. Combination of laser plus 5-fluorouracil for treatment of extensive genital condylomata acuminata. Lasers Surg Med 1988;8:135-8.
- 2 Larson J, Sand Petersen C. The patient with refractory genital warts in the STD Clinic. Treatment failure with CO₂ laser. Dan Med Bull 1990;37:194-5.
- 3 Sand Petersen C, Bjerring P, Larsen J, et al. Systemic interferon alpha-2b increases the cure rate in laser treated patients with multiple persistent genital warts: a placebo-controlled study. Genitourin Med 1991;67:99-102.
- 4 Tuero JG, Lacort LP, Justo AI, Perez DA, et el. Tratamiento de condilomas acuminados externos mediante laser de Neodimio-Yag. Arch Esp de Urol 1988;41:93-97.
- 5 Stein BS. Treatment of lesions of the external genitalia In: Smith JA, ed. Lasers in Urological Surgery. Chicago: Year Book Medical Publishers, 1985:34-8.
- 6 Landthaler M, Haina D, Brunner R, et al. Laser therapy of bowenoid papulosis and Bowen's disease. J Dermatol Surg Oncol 1986;12:1253-7.

Accepted for publication 15 July 1991